

Detailed Specifications & Technical Data

METRIC MEASUREMENT VERSION



1829BC Coax - Series 6

For more Information
please call

1-800-Belden1



Description:

Series 6, 18 AWG solid .040" bare copper conductor, gas-injected foam polyethylene insulation, Duobond® II + aluminum braid shield (60% coverage), black polyethylene jacket.

Physical Characteristics (Overall)

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (mm)
1	18	Solid	BCAC - Bare Copper w/Anti-Corrosion Treatment	1.02362

Total Number of Conductors: 1

Corrosion Resistance: Yes

Insulation

Insulation Material:

Insulation Material	Dia. (mm)
Gas-injected FPE - Foam Polyethylene	4.572

Outer Shield

Outer Shield Material:

Layer #	Outer Shield Trade Name	Type	Outer Shield Material	Coverage (%)
1	Bonded Duofoil®	Tape	Bonded Aluminum Foil-Polyester Tape-Aluminum Foil	100
2		Braid	AL - Aluminum	60

Outer Shield Flooding Grease: CoreGuard®

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PE - Polyethylene

Overall Cable

Overall Nominal Diameter: 6.858 mm

Mechanical Characteristics (Overall)

Operating Temperature Range: -55°C To +80°C

Non-UL Temperature Rating: 80°C

Bulk Cable Weight: 35.717 Kg/Km

Max. Recommended Pulling Tension: 355.856 N

Min. Bend Radius/Minor Axis: 69.850 mm

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

EU CE Mark: No

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 01/01/2004

EU Directive 2002/96/EC (WEEE):	Yes
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EU Directive 2003/11/EC (BFR):	Yes
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CA Prop 65 (CJ for Wire & Cable):	Yes
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MII Order #39 (China RoHS):	Yes
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Series Type:	Series 6
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Suitability

Suitability - Burial:	Yes
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Plenum/Non-Plenum

Plenum (Y/N):	No
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Electrical Characteristics (Overall)**Nom. Characteristic Impedance:**

Impedance (Ohm)	Tolerance (Ohms)
75	± 3

Nom. Inductance:

Inductance (µH/m)
0.318257

Nom. Capacitance Conductor to Shield:

Capacitance (pF/m)
53.1522

Nominal Velocity of Propagation:

VP (%)
83

Nominal Delay:

Delay (ns/m)
3.9372

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/km)
20.9984

Nominal Outer Shield DC Resistance:

DCR @ 20°C (Ohm/km)
29.529

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
5	1.6405
55	4.5934
211	8.5306
500	13.4521
750	16.7331
862	18.0455
1000	19.686
1450	25.5918
1800	28.2166
2250	32.1538
3000	37.0753

Max. Attenuation:

Freq. (MHz)	Attenuation (dB/100m)
5	2.19827
55	5.2496
211	9.41647
500	14.6989
750	18.3408
862	19.6204

1000	21.4577
1450	26.248
1800	28.8728
2250	32.81
3000	39.0439

Max. Operating Voltage - Non-UL:

Voltage
300 V RMS

Minimum Structural Return Loss:

Start Freq. (MHz)	Stop Freq. (MHz)	Min. SRL (dB)
950	2250	15
2250	3000	10

Sweep Test

Sweep Testing: 950 MHz - 3 GHz

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
1829BC 0101000	305 MT	12.247 KG	BLACK	C	#18 LDPE/GIFHDLPE SH PE

Notes:

C = CRATE REEL PUT-UP.

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